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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,787	01/11/2005	Kenichi Miyoshi	L9289.04193	2438

24257 7590 03/26/2008
DICKINSON WRIGHT PLLC
1901 L STREET NW
SUITE 800
WASHINGTON, DC 20036

EXAMINER

MIAH, LITON

ART UNIT	PAPER NUMBER
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2617

MAIL DATE	DELIVERY MODE
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03/26/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/520,787	Applicant(s) MIYOSHI ET AL.	
	Examiner LITON MIAH	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Action is in response to Applicant's amendment filed on December 21, 2007. Claims 1-4 and 7 are still pending in the present application. Claims 5 and 6 have been cancelled. **This Action is made FINAL.**

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1, 3-4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (5,771,467) in view of Katz et al. (2003/0076787).

For claim 1, Sato discloses a receiving apparatus comprising:
a reception quality measurer **(see column 3 lines 40-43)** that measures a reception quality of a receiving packet **(see column 2 lines 19-24)**; an error correction decoder **(see fig. 1 box 17)** that performs error correction decoding processing upon the receiving packet **(see column 3 lines 10-35)**; an error detector **(see fig. 1 box 17)** that performs error detection processing upon the receiving packet subjected to the error correction decoding processing **(see column 3 lines 10-35)**; a command generator **(see column 2 lines 12-16)** that, according to a determination result by the threshold level determiner and an error detection result by the error detector, generates a command that instructs a communicating apparatus to transmit a new packet, retransmit the packet, stop packet transmission, or resume the packet transmission **(see column 2 lines 9-18 and column 4 lines 1-15)**; and a transmitter that transmits the generated command to the communicating apparatus **(see column 3 lines 26-28)**.

For claim 1, Sato discloses all the subject matter of the claimed invention with the exception of a threshold level determine that provides a first threshold level and a second threshold level. Katz et al from the same or similar fields of endeavor teaches a threshold level determiner **(see paragraph 0008)** that provides a first threshold level

and a second threshold level below the first threshold level and determines a scale relationship of the reception quality to each threshold level (**see paragraph 0008 lines 5-22**). Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention to have a threshold level determine that provides a first threshold level and a second threshold level as taught by Katz et al in the communication network of Sato. A threshold level determine that provides a first threshold level and a second threshold level as taught by Katz et al can be modified/implemented into the communication network of Sato by having more than 1 threshold of Katz et al in communication terminal of Sato. The motivation for using a threshold level determine that provides a first threshold level and a second threshold level as taught by Katz et al in the communication network of Sato being that it improves spectral efficiency and high transfer rates.

For claim 3, Sato discloses the command generator generates a command based on the number of times a same comparison result continues in the threshold level determiner (**see column 4 lines 10-14**).

For claim 4, Sato discloses the command generator generates a command that instructs to stop the packet transmission when errors are detected a predetermined number of times consecutively in receiving packets (**see column 3 lines 63-64 and column 4 lines 1-6**).

For claim 7, Sato discloses a receiving apparatus comprising:
a reception quality measuring step (**see column 3 lines 40-43**) of measuring a reception quality of a receiving packet (**see column 2 lines 19-24**); an error correction

decoding step (**see fig. 1 box 17**) of performing error correction decoding processing upon the receiving packet (**see column 3 lines 10-35**); an error detecting step (**see fig. 1 box 17**) of performing error detection processing upon the receiving packet subjected to the error correction decoding processing (**see column 3 lines 10-35**); a command generating step (**see column 2 lines 12-16**) of generating a command that instructs a communicating apparatus to transmit a new packet, retransmit the packet, stop packet transmission, or resume the packet transmission according to a determination result in the threshold level determining step and an error detection result in the error detecting step, (**see column 2 lines 9-18 and column 4 lines 1-15**); and transmitting the generated command to the communicating apparatus (**see column 3 lines 26-28**).

For claim 7, Sato discloses all the subject matter of the claimed invention with the exception of a threshold level determine that provides a first threshold level and a second threshold level. Katz et al from the same or similar fields of endeavor teaches a threshold level determining step (**see paragraph 0008**) of providing a first threshold level and a second threshold level below the first threshold level and determining a scale relationship of the reception quality to each threshold level (**see paragraph 0008 lines 5-22**). Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention to have a threshold level determine that provides a first threshold level and a second threshold level as taught by Katz et al in the communication network of Sato. A threshold level determine that provides a first threshold level and a second threshold level as taught by Katz et al can be modified/implemented into the communication network of Sato by having more than 1

threshold of Katz et al in communication terminal of Sato. The motivation for using a threshold level determine that provides a first threshold level and a second threshold level as taught by Katz et al in the communication network of Sato being that it improves spectral efficiency and high transfer rates.

6. **Claim 2** rejected under 35 U.S.C. 103(a) as being unpatentable over Sato and Katz et al. as applied to claim 1 above, and further in view of **Faerber (2003/0031143)**.

For **Claim 2**, Sato discloses the receiving apparatus comprising:
thereafter generates a command that requests to resume the packet transmission when the reception quality of the packet for another user is greater than the first threshold level, and generates a command that instructs to stop the packet transmission when the reception quality is below the second threshold level (**see column 3 lines 42-57**).

For claim 2, Sato and Katz et al. discloses all the subject matter of the claimed invention with the exception of the first threshold level greater than the second threshold level. Faerber from the same or similar fields of endeavor teaches the command generator generates a command that instructs to temporarily suspend the packet transmission when the reception quality is below the first threshold level yet greater than the second threshold level (**see paragraph 0039 lines 3-9**). Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention to have the first threshold level compared with the second threshold level as taught by Faerber in the communication network of Sato and Katz et al. The first threshold level compared with the second threshold level as taught by Faerber can be modified/implemented into

the communication network of Sato and Katz et al. by having more than 1 threshold (see figure 3) of Faerber into the communication terminal of Sato and Katz et al. The motivation for using the first threshold level compared with the second threshold level as taught by Faerber in the communication network of Sato and Katz et al. being that it improves spectral efficiency and high transfer rates.

Response to Arguments

7. Applicant's arguments filed December 21, 2007 have been fully considered but they are not persuasive.

Applicant argues that Sato does not disclose **“(a) a communicating apparatus to transmit a new packet, retransmit the packet, stop packet transmission, or resume the packet transmission (see Remarks page 7 last paragraph), and (b) an error detector that performs error detection processing on a received packet (see Remarks page 8 second paragraph).”**

In response to the preceding arguments examiner respectfully submits that **Sato** teaches **“a communicating apparatus to transmit a new packet, retransmit the packet, stop packet transmission, or resume the packet transmission”** as the unit is instructed to halt and restart transmission of data message from the terminal (See Sato, column 2, lines 9-18 also column 4 lines 1-15). Since the claimed limitations are set forth in the alternative as recited by the use of a 'or', Sato does not have to teach all “transmit a new packet, retransmit the packet, stop packet transmission and resume the packet transmission” to meet the claimed limitations.

In response to the preceding arguments examiner respectfully submits that **Sato** teaches “**an error detector that performs error detection processing on a received packet**” as a decoder 17 detects errors, (see Sato, column 3 lines 30-35) the decoder is comparing the bit error rate.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

9. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liton Miah whose telephone number is (571)270-3124. The examiner can normally be reached on Monday through Friday 7:30am to 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on (571)272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Liton Miah

/Rafael Pérez-Gutiérrez/
Supervisory Patent Examiner, Art Unit 2617